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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,852

01/17/2006

Koji Abe

740709-550

5132

22204

7590

09/21/2011

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EXAMINER

WEINER, LAURA S

ART UNIT

PAPER NUMBER

1726

MAIL DATE

DELIVERY MODE

09/21/2011

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/564,852	ABE ET AL.	
	Examiner	Art Unit	
	/Laura Weiner/	1726	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on The Appeal Brief and TD filed 7-28-2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-15, 18 and 19 is/are rejected.
- 7) ☒ Claim(s) 16 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments in the Appeal brief, filed 7-28-2011, with respect to the rejection of claims 13-15, 18-19 under 35 U.S.C. 103(a) as being unpatentable over Hamamoto et al. (JP 2002-124297, translation) in view of Hamamoto et al. (US 2002/0122988)/(US 6,866,966) or Hamamoto et al. (6,927,001) and further in view of Koshina (JP 2003-142075, abstract) have been fully considered and are persuasive. Therefore the rejection has been withdrawn. The election of species has also been withdrawn.

Terminal Disclaimer

2. The terminal disclaimer filed on 7-28-2011 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of 10/584,266 has been reviewed and has not been accepted and has been disapproved. The wrong form was used. PTO/SB/25 form is the form that needs to be used.

The rejection of claims 13-15, 18-19 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 and 8 of copending Application No. 10/584,266 in view of Koshina (JP 2003-142075, abstract) remains because the terminal disclaimer was not approved.

Double Patenting

3. Claims 13-15, 18-19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-6 and 8 of copending Application No. 10/584,266 in view of Koshina (JP 2003-142075, abstract).

Although the conflicting claims are not identical, they are not patentably distinct from each other because Application No. 10/584,266 claims a secondary battery comprising a negative electrode comprising carbon, a positive electrode and an electrolyte containing vinylene carbonate and di(2-propynyl) oxalate where said vinylene carbonate is added in an amount of 0.1-3% by mass and said di(2-propynyl) oxalate is added in an amount of 0.1-2% by mass. The packing density of the negative electrode active material is 1.3 g/ml or higher. The electrolyte is composed of a mixed solvent of ethylene carbonate and noncyclic carbonate.

Application No. 10/584,26 claims the claimed invention except for citing that the positive electrode composition layer has a density of 3.2-4.0 g/cm³ and that the positive electrode comprises a complex metal oxide of lithium and is provided on aluminum foil.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a positive electrode composition layer having a density in the range of 3.2-4.0 g/cm³ in order to increase battery capacity and since it has been held that where general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233.

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Koshina teaches a battery providing a negative electrode comprising a cathode comprising LiCoO_2 having a density of 3.3-3.7 g/cm³ coating on an aluminum foil, an anode comprising graphite having a density of 1.4-1.8 g/cm³ coated on a copper foil and an electrolyte solution. Koshina teaches that the battery has high energy density and high safety without easily causing capacity deterioration even in storing the battery in a high-temperature atmosphere.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a negative electrode comprising a cathode comprising LiCoO_2 having a density of 3.3-3.7 g/cm³ coating on an aluminum foil and an anode comprising graphite having a density of 1.4-1.8 g/cm³ coated on a copper foil as taught by Koshina for the battery taught by Hamamoto et al. ('267) because Koshina teaches that the battery has high energy density and high safety without easily causing capacity deterioration even in storing the battery in a high-temperature atmosphere.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Allowable Subject Matter

4. Claims 16-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Laura Weiner/ whose telephone number is (571)272-1294. The examiner can normally be reached on M-H (6:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on 571-272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Laura Weiner/
Primary Examiner
Art Unit 1726

September 19, 2011